

Claim 8, line 22, after "said" insert --first--.

Claim 10, line 13, before "groove" insert

--first rectangular--.

Claim 10, line 15, before "groove" insert

--first rectangular--.

Claim 10, line 16, before "groove" insert

--first rectangular--.

Claim 10, line 17, after "said" insert

--first rectangular--.

Claim 10, line 21, after "second" insert --, inner--.

Add Claims 12 to 16 as follows:

Sub B. 4
22. A method for making a semiconductor device comprising the following steps:

providing a first region of semiconductor material having a first conductivity type;

forming a second region of semiconductor material having a second conductivity type above said first region;

forming a third region of said first conductivity type above a portion of said second region;

forming a first groove, said first groove extending downward through said third and said second regions into said first region so that a first portion of said third region and a first portion of said second region lie on at least one side of said first groove;

lining said first groove with a dielectric material, thereby forming a second, inner groove;

filling the bottom portion of said second, inner groove with a conductive material so that a top surface of said conductive material in said second, inner groove lies adjacent to the portion of dielectric material adjacent to said third region; and

forming an insulating layer having a planar top sur-

face over the device resulting from the preceding steps.

⁶
~~13.~~ The method of ~~claim 12~~ ⁵ further comprising the steps of:

¹
forming a mask on a first portion of said conductive material in said second, inner groove, a second portion of said conductive material not being covered by said mask;

¹
removing part of said second portion of said conductive material, the remaining conductive material in said second, inner groove serving as a gate; and

¹
and forming an electrically conductive layer for electrically contacting said first portion of said conductive material.

²
~~14.~~ The method of ~~claim 12~~ ⁵ further comprising the step of removing a portion of said conductive material in said second, inner groove so that a top portion of said second, inner groove adjacent to said dielectric material is not filled with conductive material, said step of forming an insulating layer comprising the step of forming insulating material in said top portion of said second, inner groove.

⁸
~~15.~~ The method of ~~claim 12~~ ⁵ wherein said step of filling the bottom portion comprises the steps of forming said conductive material in said second, inner groove and on the surface of said third region and then etching said conductive material so that said conductive material on the surface of said third region adjacent to said second, inner groove is removed.

⁹
~~16.~~ The method of ~~claim 12~~ ⁵ wherein said step of filling the bottom portion comprises the step of forming said conductive material in said second inner groove and etching a